

DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF ENERGY, MINERAL AND LAND RESOURCES

**FACT SHEET**

GENERAL PERMIT NCG060000  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
PERMIT TO DISCHARGE STORMWATER

2021 – 2026 Permit Term

**1. TYPES OF DISCHARGES COVERED**

*a. Industrial Activities Covered by this General Permit*

**Coverage under this General Permit is applicable to:**

- ◆ All owners or operators of stormwater point source discharges associated with activities classified as establishments primarily engaged in:
  - Food and Kindred Products [standard industrial classification (SIC) 20],
  - Tobacco Products (SIC 21),
  - Soaps, Detergents and Cleaning Preparations, Perfumes, Cosmetics and Other Toilet Preparations (SIC 284),
  - Drugs (SIC 283), and
  - Public Warehousing and Storage (SIC 4221-4225).
- ◆ Stormwater point source discharges from like industrial activities deemed by The Division of Energy, Mineral, and Land Resources (DEMLR) to be similar to these operations in the process, or the discharges, or the exposure of raw materials, intermediate products, by-products, products, or waste products.
- ◆ Facilities engaged in certain biogas recovery operations using anaerobic digesters to capture methane from wastes from covered activities.

*b. Types of Operations Covered*

**Major Group 20: Food and Kindred**

This major group includes establishments manufacturing or processing foods and beverages for human consumption, and certain related products, such as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls. Products described as dietetic are classified in the same manner as non-dietetic products (e.g., as candy, canned fruits, cookies). Chemical sweeteners are classified in Major Group 28.

**Major Group 21: Tobacco Products**

This major group includes establishments engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, snuff, and reconstituted tobacco and in stemming and redrying tobacco. Also included in this major group is the manufacture of non-tobacco cigarettes. The manufacture of insecticides from tobacco by-products is included in Major Group 28.

**2841 Soap and Other Detergents, Except Specialty Cleaners**

Establishments primarily engaged in manufacturing soap, synthetic organic detergents, inorganic alkaline detergents, or any combination thereof, and establishments producing crude and refined glycerin from vegetable and animal fats and oils. Establishments primarily engaged in manufacturing shampoos or shaving products, whether from soap or synthetic detergents, are classified in Industry 2844; and those manufacturing synthetic glycerin are classified in Industry 2869.

**2842 Specialty Cleaning, Polishing, and Sanitation Preparations**

Establishments primarily engaged in manufacturing furniture, metal, and other polishes; waxes and dressings for fabricated leather and other materials; household, institutional, and industrial plant disinfectants; nonpersonal deodorants; drycleaning preparations; household bleaches; and other sanitation preparations. Establishments primarily engaged in manufacturing industrial bleaches are classified in Industry 2819, and those manufacturing household pesticidal preparations are classified in Industry 2879.

**2843 Surface Active Agents, Finishing Agents, Sulfonated Oils, and Assistants**

Establishments primarily engaged in producing surface active preparations for use as wetting agents, emulsifiers, and penetrants. Establishments engaged in producing sulfonated oils and fats and related products are also included.

**2844 Perfumes, Cosmetics, and Other Toilet Preparations**

Establishments primarily engaged in manufacturing perfumes (natural and synthetic), cosmetics, and other toilet preparations. This industry also includes establishments primarily engaged in blending and compounding perfume bases; and those manufacturing shampoos and shaving products, whether from soap or synthetic detergents. Establishments primarily engaged in manufacturing synthetic perfume and flavoring materials are classified in Industry 2869, and those manufacturing essential oils are classified in Industry 2899.

**2833 Medicinal Chemicals and Botanical Products**

Establishments primarily engaged in: (1) manufacturing bulk organic and inorganic medicinal chemicals and their derivatives and (2) processing (grading, grinding, and milling) bulk botanical drugs and herbs. Included in this industry are establishments primarily engaged in manufacturing agar-agar and similar products of natural origin, endocrine products, manufacturing or isolating basic vitamins, and isolating active medicinal principals such as alkaloids from botanical drugs and herbs.

**2834 Pharmaceutical Preparations**

Establishments primarily engaged in manufacturing, fabricating, or processing drugs in pharmaceutical preparations for human or veterinary use. The greater part of the products of these establishments are finished in the form intended for final consumption, such as ampoules, tablets, capsules, vials, ointments, medicinal powders, solutions, and suspensions. Products of this industry consist of two important lines, namely: (1) pharmaceutical preparations promoted primarily to the dental, medical, or veterinary professions, and (2) pharmaceutical preparations promoted primarily to the public.

**2835 In Vitro and In Vivo Diagnostic Substances**

Establishments primarily engaged in manufacturing in vitro and in vivo diagnostic substances, whether or not packaged for retail sale. These materials are chemical, biological, or radioactive substances used in diagnosing or monitoring the state of human or veterinary health by identifying and measuring normal or abnormal constituents of body fluids or tissues.

#### 2836 Biological Products, Except Diagnostic Substances

Establishments primarily engaged in the production of bacterial and virus vaccines, toxoids, and analogous products (such as allergenic extracts), serums, plasmas, and other blood derivatives for human or veterinary use, other than in vitro and in vivo diagnostic substances. Included in this industry are establishments primarily engaged in the production of microbiological products for other uses. Establishments primarily engaged in manufacturing in vitro and in vivo diagnostic substances are classified in Industry 2835.

#### 4221 Farm Product Warehousing and Storage

Establishments primarily engaged in the warehousing and storage of farm products. Establishments primarily engaged in refrigerated warehousing are classified in Industry 4222.

#### 4222 Refrigerated Warehousing and Storage

Establishments primarily engaged in the warehousing and storage of perishable goods under refrigeration. The establishments may also rent locker space for the storage of food products for individual households and provide incidental services for processing, preparing, or packaging such food for storage. Establishments primarily selling frozen foods for home freezers (freezer and locker meat provisioners) are classified in Retail Trade, Industry 5421.

#### 4225 General Warehousing and Storage

Establishments primarily engaged in the warehousing and storage of a general line of goods. The warehousing of goods at foreign trade zones is classified in Industry 4226. Field warehousing is classified in Services, Industry 7389.

(From <http://www.osha.gov/>)

### *c. Characteristics of Discharged Stormwater*

Typical Food and Kindred products processing facilities do not conduct many processing operations outdoors. The nature of the business, and the required sanitary conditions, require that raw materials through final product be protected from stormwater. As such, the contamination of stormwater from this sector is primarily from the loading and unloading of products and raw materials, spillage and leaks from tanks and containers stored outdoors, waste management practices, pest control, and improper connections to the storm sewer. Such facilities generally do not have emissions from stacks. Storage of raw materials, intermediate products, or chemicals does not typically occur outside. Production of significant emissions from stacks or air exhaust systems are not a part of the manufacturing process at these facilities. The use of un-housed manufacturing and heavy industrial equipment is minimal. Because of the processes and materials used at these plants, significant amounts of fugitive dust or particulate are not generated. In addition, most facilities in these categories do not use hazardous materials or chemicals. Some food processing facilities use solvents such as hexane, methyl ethyl ketone, and methylene chloride for extraction and leaching operations. However, extraction and leaching operations are expected to be performed indoors. Those industries involved in the manufacture of soap, detergents, cleaning preparations, perfumes, cosmetics and other toilet preparations may conduct some portion of their operations outdoors. They may be expected to have process and manufacturing equipment that is exposed to the environment. Other common sources of stormwater contamination are outside storage facilities such as tanks and chemical and material conveyance systems which

release pollutants as a result of leaking pump seals or piping and spills. However, their activity is closely related to the activities involved in the food, tobacco, and drugs industries.

Establishments that are involved in public warehousing and storage are most often conducting their activities in indoor locations. These activities include such operations as farm product warehousing and storage (bean elevators, grain elevators, potato cellars and tobacco warehousing, etc.) and refrigerated warehousing and storage (cheese warehouses, cod storage locker rental, storage or warehousing of frozen or refrigerated goods, self-storage warehousing, etc.). Storage of raw materials, intermediate products, final products, by-products, waste products, and chemicals generally does not occur outside. Production of significant emissions from stacks or air exhaust systems will not be a part of the warehousing and storage activities. The use of un-housed manufacturing and heavy industrial equipment will not typically occur at these facilities. Significant amounts of dust or particulate are not generated at these facilities.

This renewal permit proposed the same parameters be monitored in stormwater discharges as in the previous permit. The decision to retain parameters was based on their continued usefulness as stormwater pollution indicators for these industry types—especially within the monitoring scheme and tiered responses continued by this renewal permit.

*d. Geographic Area(s) Covered by this General Permit*

Discharges covered by this General Permit are located at any place within the political boundary of the State of North Carolina. Discharges located on the Cherokee Indian Tribal Reservation are subject to permitting by the US Environmental Protection Agency and are not covered by this General Permit.

*e. Receiving Waters*

Receiving waters include all surface waters of North Carolina or municipal separate storm sewer systems conveying stormwater to surface waters.

## **2. DISCHARGE CONTROLS AND LIMITATIONS**

The renewal permit maintains benchmark concentrations to provide facilities a tool with which to assess the effectiveness of best management practices (BMPs). These benchmark concentrations are not effluent limits, but provide guidelines for the facility's Stormwater Pollution Prevention Plan. Exceedances of benchmark values require the permittee to increase monitoring, increase management actions, increase record keeping, and/or install stormwater BMPs in a tiered program.

## **3. MONITORING AND REPORTING REQUIREMENTS**

This permit specifies monitoring and reporting requirements for both quantitative and qualitative assessment of the stormwater discharges and operational inspections of the entire facility. Pollutant parameters and sampling frequency are based on the industrial activity performed at subject facilities, and on the potential for contamination of the stormwater runoff from those facilities. Qualitative parameters are consistent with other general permits in the NPDES stormwater program.

The renewal permit retains the term “**measurable storm event.**” A measurable storm event is an event that results in an actual discharge. To qualify as a measurable storm event, the previous storm event must have been at least 72 hours prior.

The renewal permit requires the permittee to separate sampling events by a minimum of 30 days, rather than the 60 days required by the previous permit. This is due to the new requirement of **quarterly** monitoring, rather than semi-annual monitoring.

#### **4. COMPLIANCE SCHEDULE**

The compliance schedule in Part I still advises that the permittee comply with Limitations and Controls specified for stormwater discharges in accordance with the following schedule:

The permittee shall comply with Limitations and Controls specified for stormwater discharges in accordance with the following schedule:

- (a) Existing Facilities already operating but applying for permit coverage for the first time: The Stormwater Pollution Prevention Plan shall be developed and implemented within 12 months of the effective date of the Certificate of Coverage and updated thereafter on an annual basis. Secondary containment, as specified in Part B-9 of this General Permit, shall be accomplished within 12 months of the effective date of the issuance of the Certificate of Coverage.
- (b) New Facilities applying for coverage for the first time: The Stormwater Pollution Prevention Plan shall be developed and implemented prior to the beginning of discharges from the operation of the industrial activity and be updated thereafter on an annual basis. Secondary containment, as specified in Part B of this General Permit shall be accomplished prior to the beginning of discharges from the operation of the industrial activity.
- (c) Existing facilities previously permitted and applying for renewal under this General Permit: All requirements, conditions, limitations, and controls contained in this permit (except new SWPPP elements in this permit renewal) shall become effective immediately upon issuance of the Certificate of Coverage. New elements of the Stormwater Pollution Prevention Plan for this permit renewal shall be developed and implemented within 6 months of the effective date of this General Permit and updated thereafter on an annual basis. Secondary containment, as specified in Part B of this General Permit shall be accomplished prior to the beginning of discharges from the operation of the industrial activity.

#### **5. SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE**

Part F addresses electronic reporting requirements mandated by the federal NPDES Electronic Reporting Rule. When the agency’s electronic reporting system is able to accept NPDES stormwater permit monitoring data, the permittee must report discharge monitoring data electronically using NC Division of Water Resources’ Electronic Discharge Monitoring Report (eDMR) internet application. NC DEMLR will notify permittees when eDMR is ready to accept data.

## 6. BASIS FOR CONTROLS AND LIMITATIONS

The conditions of this general permit have been designed using best professional judgment to achieve water quality protection through compliance with the technology-based standards of the Clean Water Act (Best Available Technology [BAT] and Best Conventional Pollutant Control Technology [BCT]). Where the Director determines that a water quality violation is occurring and water quality-based controls or effluent limitations are required to protect the receiving waters, coverage under the general permit shall be terminated and an individual permit will be required. Based on a consideration of the appropriate factors for BAT and BCT requirements, and a consideration of the factors discussed below in this fact sheet for controlling pollutants in stormwater discharges associated with the activities as described in Item 1 (Types of Discharge Covered), the permit retains a set of requirements for developing and implementing stormwater pollution prevention plans, and specific requirements for monitoring and reporting on stormwater discharges.

The permit conditions reflect the Environmental Protection Agency's (EPA) and North Carolina's pollution prevention approach to stormwater permitting. The quality of the stormwater discharge associated with an industrial activity will depend on the availability of pollutant sources. This renewal permit still reflects the Division's position that implementation of Best Management Practices (BMPs) and traditional stormwater management practices which control the source of pollutants meets the definition of BAT and BCT. The permit conditions are not numeric effluent limitations, but rather are designed to be flexible requirements for developing and implementing site specific plans to minimize and control pollutants in the stormwater discharges associated with the industrial activity.

Title 40 Code of Federal Regulations (CFR) Part 122.44(k)(2) authorizes the use of BMPs in lieu of numeric effluent limitations in NPDES permits when the agency finds numeric effluent limitations to be infeasible. The agency may also impose BMP requirements which are "reasonably necessary" to carry out the purposes of the Act under the authority of 40 CFR 122.44(k)(3). The conditions of the renewal permit are retained under the authority of both of these regulatory provisions. The pollution prevention requirements (BMP requirements) in this permit operate as limitations on effluent discharges that reflect the application of BAT/BCT. The basis is that the BMPs identified require the use of source control technologies which, in the context of this general permit, are the best available of the technologies economically achievable (or the equivalent BCT finding). All facilities covered by this stormwater general permit must prepare, retain, implement, and (at a minimum of annually) update a stormwater pollution prevention plan. The term "pollution prevention" distinguishes this source reduction approach from traditional pollution control measures that typically rely on end-of-pipe treatment to remove pollutants in the discharges. The plan requirements are based primarily on traditional stormwater management, pollution prevention and BMP concepts, providing a flexible basis for developing site-specific measures to minimize and control the amounts of pollutants that would otherwise contaminate the stormwater runoff.

The pollution prevention approach adopted in the stormwater pollution prevention plans in the renewal permit still focuses on two major objectives: 1) to identify sources of pollution potentially affecting the quality of stormwater discharges associated with industrial activity from the facility; and 2) to describe and ensure that practices are implemented to minimize and control pollutants in stormwater discharges associated with industrial activity from the facility and to ensure compliance with the terms and conditions of this permit.

The Division believes that it is not appropriate, at this time, to require a single set of effluent limitations or a single design or operational standard for all facilities which discharge stormwater associated with industrial activity. This permit instead establishes a framework for the development and implementation of site-specific stormwater pollution prevention plans. This framework provides the necessary flexibility to address the variable risk for pollutants in stormwater discharges associated with the industrial activities that are addressed by this permit, while ensuring procedures to prevent stormwater pollution at a given facility are appropriate given the processes employed, engineering aspects, functions, costs of controls, location, and age of facility (as discussed in 40 CFR 125.3). This approach allows flexibility to establish controls which can appropriately address different sources of pollutants at different facilities.

**There has been no significant change to this rationale since the previous general permit NCG06.**

### *Stormwater Benchmarks*

The **pH** benchmark range of 6.0 – 9.0 standard units is based on N.C. Water Quality Standards in 15A NCAC 02B .0211 and is consistent with other renewed general stormwater permits.

The standard **Total Suspended Solids (TSS)** benchmark of 100 mg/L is based on the median concentration derived from the National Urban Runoff Program (NURP) study in 1983 and serves as a benchmark in most other industrial stormwater permits with TSS monitoring. The lower TSS benchmark for ORW, HQW, trout, and primary nursery area (PNA) waters of 50 mg/L reflects half that standard value and was set to flag potential problems in discharges to waters with much lower water quality standards for TSS concentrations (20 mg/L for HQW and ORW; 10 mg/L for trout and PNA waters).

The benchmark for **Chemical Oxygen Demand (COD)** remains at 120 mg/L. This benchmark was set using best professional judgement. Generally, COD is found at levels four times the BOD<sub>5</sub> levels in domestic wastewaters.

The **Oil & Grease** benchmark of 30 mg/L is based on best professional judgement and reflects typical wastewater limits.

The benchmark for **Non-Polar Oil and Grease, or TPH, [EPA Method 1664 (SGT-HEM)]** remains at 15 mg/L. The TPH benchmark is consistent with other States' benchmarks and/or limits. We would only expect in discharges associated with significant oil contamination to exceed this benchmark.

The benchmark for **Fecal Coliform** is 1000 col/100ml. This value is based on BPJ and was consistent with the maximum (one-sample) threshold specified in Virginia's older Water Quality Standards. The N.C. Water Quality Standard (for all Class C waters, based on human health) says that fecal coliforms shall not exceed a geometric mean of 200/100ml (MF count) based upon at least five consecutive samples examined during any 30-day period, nor exceed 400/100ml in more than 20 percent of the samples examined during such period. The SPU does not consider these values practical for a stormwater benchmark. In addition, the N.C. Standard, 2B .0211, specifies that violations of that standard "are expected during rainfall events." The most recent N.C. Water Quality Standard maintains the fecal coliform indicator for freshwaters. If sampling is necessary, monthly sampling is recommended in order to yield statistically significant results. Consider comparing the Benchmark Guidance Value to a geometric mean of at least 10 samples.

The benchmark for **Enterococci** is 500 enterococcus/100 ml. This was set using EPA's 1986 Ambient Water Quality Criteria for Bacteria. However, the data supporting this value was collected through non-traditional means. Many people who had been exposed to waters with varying enterococcus levels were interviewed several days after exposure. Though this method was an attempt to determine an appropriate value, North Carolina still considers this value to be BPJ. However, this value represents a single-sample maximum for saltwaters, and therefore if enterococcus sampling is necessary, compliance can be determined by a single sample (or by two annual samples as is typical for stormwater permitting), rather than by multiple samples to ensure statistical significance. (Note, Rules 15A NCAC 02B .0220 and .0222 were amended on May 1, 2007 to reflect the new standard of 35 enterococci per 100 ml, based on a minimum of five samples within any consecutive 30 days.)

## **7. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS**

There are no requested variances or alternatives to required standards. Facilities requesting variances to required standards will not be covered under this General Permit but will instead be required to seek coverage under an individual permit.

## **8. THE ADMINISTRATIVE RECORD**

The administrative record, including application, draft permit, fact sheet, public notice, comments received, and additional information, is available by writing to:

Stormwater Program  
Division of Energy, Mineral, and Land Resources (DEMLR)  
1612 Mail Service Center  
Raleigh, North Carolina 27699-1612

Due to the COVID-19 pandemic, visitors are not currently allowed at DEMLR offices. However, electronic copies of the documents listed above are available on our Laserfiche online repository, or by emailing [alaina.morman@ncdenr.gov](mailto:alaina.morman@ncdenr.gov).

## **9. STATE CONTACT**

Additional information about the draft and final permit may be obtained between the hours of 8:00 AM and 5:00 PM Monday through Friday by contacting Alaina Morman at [alaina.morman@ncdenr.gov](mailto:alaina.morman@ncdenr.gov).

## **10. SCHEDULE OF PERMIT ISSUANCE**

Draft Permit Public Notice – Statewide Notice to publish: May 17, 2021  
Draft available on-line: May 17, 2021  
Comment Period Ends: June 16, 2021

Permit Scheduled to Issue – No later than: July 1, 2021  
Effective: July 1, 2021



## 11. PROCEDURE FOR THE FORMULATION OF FINAL DETERMINATIONS

### *a. Comment Period*

The Division of Energy, Mineral, and Land Resources proposes to issue an NPDES General Permit for the above described stormwater discharges subject to the outlined benchmark concentrations, management practices, and special conditions. These determinations are open to comment from the public.

Interested persons are invited to submit written comments on the permit applications or on the Division of Energy, Mineral, and Land Resources' proposed determinations to the following address:

Stormwater Program  
Division of Energy, Mineral, and Land Resources  
1612 Mail Service Center  
Raleigh, North Carolina 27699-1612  
Attn: **Alaina Morman**

All comments received within thirty (30) days following the date of public notice are considered in the formulation of final determinations.

### *b. Public Meeting*

The Director of the Division of Energy, Mineral, and Land Resources may hold a public meeting if there is a significant degree of public interest in a proposed permit or group of permits. Public notice of such a meeting will be circulated in newspapers and on the Division's website.

### *c. Appeal Hearing*

An applicant whose permit is denied, or is granted subject to conditions he deems unacceptable, shall have the right to a hearing before the Commission upon making written demand to the Office of Administrative Hearing (OAH) within 30 days following issuance or denial of the permit.

### *d. Issuance of a Permit When no Hearing is Held*

If no public meeting or appeal hearing is held, after review of the comments received, and if the Division of Energy, Mineral, and Land Resources' determinations are substantially unchanged, the permit will be issued and become effective on the first day of the month following the issuance date. This will be the final action of the Division of Energy, Mineral, and Land Resources.

If a public meeting or appeal hearing is not held, but there have been substantial changes, public notice of the Division of Energy, Mineral, and Land Resources' revised determinations will be made. Following a 30-day comment period, the permit will be issued and will become effective on the first day of the month following the issuance date. This will be the final action of the Division of Energy, Mineral, and Land Resources unless a public meeting or appeal hearing is granted.